

5.500/5.100 Interconnection Standards Revisions Working Group

3.19 Meeting Summary

Next Meeting Scheduled April 7, 1-3:30pm, at PSD GIGA room

- **Stakeholder Review:** Do we have the appropriate people in the room?
 - There was general consensus that many of the correct Vermont stakeholders were already participating in these meetings. Sending notice to the standard offer or Docket 8010 (PURPA avoided costs) service lists might be valuable. It was suggested that there may be others who could provide perspective and experience to inform this stakeholder group, including:
 - IEEE 1547 Working Group
 - States or utilities with high levels of penetration (e.g. Kauai,)
 - California Smart Inverter Working Group (note – there was concern about spreading this group too thin by getting into the details of what this CA group has been working on)
 - DOE technical assistance where feasible (see below on description of DOE grant)
 - ISO-NE participation to include knowledge of MA’s interconnection rule process and outcome

- **DOE Grant:** The Department detailed what the grant was for and the resources that might be available:
 - The DOE grant covers some staff time to work on the updating of the rule.
 - The bulk of the grant is for the PSD to work with GMP to update the available information with regard to each circuit’s capability to handle increasing levels of DG penetration.
 - The remainder of the grant is dedicated to updating the application/registration process.
 - There is no funding in the grant for hiring outside expert assistance, however there will be access to DOE experts and resources through the cooperative agreement portion of the grant – perhaps webinars to help this group understand what is happening elsewhere.

- **Issues to be addressed by the Working Group:** It was noted that this group should keep in mind the goals of Act 99 and other statute when considering revisions to the interconnection rule.

The following list of issues were highlighted by stakeholders as issues that the group should address going forward, the working group requested more detail on each item, provided here after discussion at the working group meeting and in some cases following the meeting with stakeholders who proposed the issue:

- Visibility of real-time system performance by VELCO/ISO/Distribution utilities.
 - This is related to the need for utilities to understand how DG operates on their system so they can (1) be operationally ready for ramping up/down of other resources; (2) ensure DG resources are appropriately considered in ensuring reliability of system, so that the grid is not over- or under-built; and, (3) continue to advocate at the regional level for a full accounting of DG’s benefits and challenges to the grid.

- Ability of Utilities to Curtail system generation
 - It was noted that at times, it is now possible for utilities to pay to provide generation into the wholesale markets. On the other hand, it may be inconsistent with State policy to curtail renewable generation if it were in favor of continuing to operate fossil fuel units. Flexibility in the rule to allow for utilities to curtail generation may be appropriate and should be discussed.

- Local Visibility to developers:
 - This is related to utilities providing detailed information about its circuits to allow developers to quickly determine whether a site has potential for hosting distributed generation.
 - Understanding the circuit level threshold after which point increased penetration really makes a difference on the circuit. There may not need to be a specific project size threshold where different interconnection procedures take hold, if there were a different circuit level threshold.
 - This issues is also related to the DOE grant (discussed above) where GMP will be updating information re: its circuits

- Who should bear the costs of upgrades to the distribution network that may be necessary to facilitate significantly increased levels of penetration?
 - When upgrades are necessary for DG, then is it in the interest of the state to socialize those costs?
 - How do tariffs interplay with the allocated costs – e.g. Open Access Transmission Tariff; ISO-NE costs. What are the tariff obligations?
 - This issue should to be coordinated with the Act 99 rate structure group.

- Interconnection application:
 - Examine requirements to determine if there are ways to reduce soft costs including synchronization with the §248 permit process

- Metering requirements:
 - Consideration of requiring specific metering capabilities – for example there are issues with resettlement of SPEED resources because a number of them don't have telemetry.
 - Understanding the data needs/desires across utilities & understanding the costs that may be incurred to achieve these
 - Is this best addressed via interconnection rule or elsewhere?

- Ensuring the rule is flexible enough to accommodate future electric energy storage interconnection issues.

- Understand & evaluate relationship to the National Electric State Code.

- The group should continue to ensure appropriate coordination between the Act 99 process and Rule 5.500 update.

- **Process/Timeline going forward:**
 - It was suggested that unlike the Act 99 meetings, it would be valuable for the Department to, after a meeting or two to better flesh out some issues, develop a strawman proposal for revised interconnection standards.
 - This proposal could start with the revised FERC Small Generators Interconnection Procedures (SGIP) with VT specific amendments.
 - The Department will respond as to whether it has the resources available to provide this proposed strawman
 - It was suggested that the next one or two meetings include presentations from various stakeholders/regional or national experts.
 - ISO-NE volunteered to discuss its desires for an interconnection rule, e.g. ride through capability. In addition, it would provide information on its experience with the new FERC SGIP implementation in Massachusetts and update to the IEEE 1547 revision process. (See below for next meeting).
 - Discussion to determine whether someone from Kauai could present at a follow up meeting.
- **Next Meeting Scheduled for April 7 1pm at the Public Service Department GIGA room.** Agenda to include
 - Presentation from ISO-NE.
 - Discussion of related issues
 - Process – possible Strawman and timeline.

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